DOCUMENT RESUME

ED 260 639 HE 018 628

AUTHOR Griffin, Virginia R.
TITLE Self-Directed Adult Learners and Learning. PANEL Resource Paper #13.
INSTITUTION National Society for Internships and Experiential Education, Raleigh, NC. Peer Assistance Network in Experiential Learning.
PUB DATE 83
NOTE 24p.; Based on an address presented at the Wisconsin Adult Educator Lyceum (Pewaukee, WI, July 15-16, 1977). For related documents, see HE 018 617-635.
PUB TYPE Viewpoints (120)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Adult Students; College Students; *Experiential Learning; Higher Education; *Independent Study; *Individualized Instruction; *Learning Experience; Nontraditional Education

ABSTRACT

Directions in self-directed learning for adults and perspectives for the future are discussed. The following five movements in self-directed learning are considered: the Knowles Group Learning Stream, the Tough Adult Learning Projects Stream, individualized programmed instruction, nontraditional institutional arrangements, and heuristic life experience learning. In addition, 10 visions for the future of self-directed learning are addressed: (1) plentiful options for self-aware learner choices; (2) opportunities to learn how to learn; (3) seeing and studying learning as a fluid process; (4) focusing on learning rather than teaching; (5) goal setting as a flow; (6) valuing of learners by educators; (7) congruence between values and techniques; (8) clarity and consistency of control; (9) interdependence, rather than independence, as a goal; and (10) developing in adult educators sensitivity and a sense of self-worth. One challenge for administrators and educational programmers is to provide a choice of self-directed learning opportunities for adults, and to encourage learners to evaluate their preference among different learning forms. Self-directed learners should trust their intuitions and own up to their strengths, desires, skills, and needs. (SW)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED260639

nsiee

BEST COPY AVAILABLE

PEER ASSISTANCE NETWORK IN EXPERIENTIAL LEARNING

Toll Free (800) 424-2933
Local Calls 331-1516

PANEL Resource Paper #13

"Self-Directed Adult Learners and Learning"

by Dr. Virginia R. Griffin

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

National Society for Internships and Experiential Educatio

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

NATIONAL SOCIETY FOR INTERNSHIPS AND EXPERIENTIAL EDUCATION

Suite 601 1735 Eye Street, N.W. Washington, D.C. 20006

Copyright 1983. Peer Assistance Network in Experiential Learning, National Society for Internships and Experiential Education (NSIEE), 124 St. Mary's Street, Raleigh, North Carolina 27605 (phone: 919-834-7536).
All rights reserved. No part of this paper may be reproduced in any form without permission in writing from NSIEE.

PANEL Resource Paper #13

"Self-Directed Adult Learners and Learning"

by Dr. Virginia R. Griffin

Jane C. Kendall, Series Editor

Dr. Griffin is an Associate Professor with the Department of Adult Education, The Ontario Institute for Studies in Education in Toronto, Ontario, Canada.

"Self-Directed Adult Learners and Learning"*

by Virginia R. Griffin

My Webster says a keynoter is to "present the essential issues of interest to the assembly." I do not presume to know the essential issues of concern to you; I do look forward to sharing with you the issues that are of deep interest to me in the area of self-directed learning. I'm now in the ninth year of my own self-directed learning project to understand the phenomenon better, and to be better at facilitating self-directed learning. Trying to consolidate and express here what I've learned in that time is a magnificent challenge. As I talk about what I have learned, I hope you will be reminded of all that you have learned about this area in your own self-directed projects.

A Grass-Roots Movement

In adult education, we seem to go through 8-year cycles of "new pushes," often depending on what the federal government is funding currently. Self-directed learning is the catch-word of this season, but it is a different kind of "push." A lot has been happening very quietly and steadily for a number of years; it is happening at the local and personal level first--it is not coming from the government down. It is almost becoming a movement, and one with promise of permanency.

Never in my 21 years of being an adult educator have I seen a time when we as adult educators have had such a clear choice between (1) doing something beautiful and socially significant, and (2) really messing up.

Self-directed learning can be beautiful. Adults newly discovering a sense of themselves as learners, in touch with their own flow, creative turns, power and strength are a joy to see. We want more and more adults to experience this joy and we know the movement must grow. The danger of messing up lies in this very growth. I take a quote from Gordon Godby--somewhat out of his context, but right on this issue:

> We see the danger of casting butterflies in bronze, and caging wild singing birds. . . . (1)

I'll say more about this danger, and the things that worry me deeply about how we educators may mess up the joy of "butterflies" and "wild singing birds" later. I will also turn those fears around for us, and look at the visions of what can be, on the backside of those fears. For like Godby, I believe

> If we can maintain the human concern, the person-for-person love (for at its best it is nothing else) which has powered the movement, then we need not fear size. (1)

But first, let's look at what is happening in self-directed learning.

The Five Streams

Several diverse but related streams are coalescing right now into a movement toward freedom, toward genuine "making-space" for adult learners,

*From remarks presented at the Wisconsin Adult Educator Lyceum, Pewaukee, WI, July 15-16, 1977.

toward a richer and deeper quality of learning and being for all of us. This movement seems to be taking on the label of "self-directed learning." And I for one think it is high time we did "get this act together," for it grows out of all of the principles we have espoused for many decades.

Let's look at each of these streams in turn.

The Knowles Group Learning Stream

Everywhere I go, I hear from the most unexpected quarters that "We're using Knowles' ideas on self-directed learning." Or, "I was at a conference with Malcolm last fall, and now I'm using learning contracts." Malcolm is having quite an impact on us, and we need to examine why this is happening. I think I understand his impact better when I reflect on a visit I had last month from a young woman, doing a masters in nursing education at another university.

She was a beautiful young woman, with her soul shining through her eyes. I suspect she had not been a flower child of the '60's, but had learned at that time a deep desire to be her own person, and continues that effort still. She is now a teacher, but is deeply discontented with her own teaching, and with the teaching-learning interactions she is experiencing as a graduate student. She had just read Self-Directed Learning (5), and at last felt hopeful that there is a way to teach that would match her values. She didn't know yet just how she was going to do it, but she had two things from her reading in addition to the hope: she had a clearer sense of her own values that she wanted to implement in her classroom, and she had some concepts such as "climate-setting" to use in her search with me and others for ways to be and to behave in the classroom.

There must be thousands of adult educators in your country and in mine who are like this young woman: searching. The search is vague until someone gives us a "leg up" on finding an answer; we usually don't set a goal and strive to reach it until we have some sense that we can be successful at it. So Malcolm is giving us a label, a hope, some specific ideas for implementing that hope. He is helping us focus our energies. Has he discovered or invented something new? No, I don't think so. But he is having a significant impact.

The Tough Adult Learning Projects Stream

Back in 1963, in a garret of some gothic structure on the campus of the University of Chicago, Allen Tough pretested his dissertation interview with me. I remember telling him about my project of learning how to buy and play a guitar. Like all the thousands of adults whom Allen and others have interviewed in this way since, I was amazed to discover that I was a self-directed learner, that I had been learning things outside of classrooms. I was amazed to discover the number of different people I had consulted, from whom I had learned in this one small project. I was intrigued to reflect on the phases I had gone through: the excitement, the discouragement, the searching for emotional support, the joy of finding it, the satisfactions I had felt as I learned.

As you can gather from this personal reflection, Allen's research (6) has been that of asking adults what learning projects they have been engaged in in the recent past, what they did in that project, how much time they spent, what help they sought and from whom. By a learning project, he means a sustained effort (at least 7 hours over several days) of the person attempting to learn and retain something specific. Note that this definition involves intentionality, a primary purpose to learn, and a fairly clear idea of what the person wants to learn. Even with these qualifiers, which eliminate much adult learning, Allen has found, and a subsequent 25+ studies have substantiated, the vast majority of adults of all ages, all occupational backgrounds and educational levels, and in several countries, do engage in learning projects.

The average person, he tells us, conducts 7 distinct learning projects in one year, spends an average of 100 hours per learning effort, and spends a total of 700 hours per year in this type of learning project. This is mind-boggling stuff! Even more mind-boggling is his finding that 80 percent of this learning is planned by amateurs; only 20 percent of it is planned by educators.

Every time I have heard Allen say this during the last nine years, I have bristled a little. He has always made me feel that my life work of teaching adults has been wrongly spent--that I ought to have been doing something more useful, and when was I going to wise up and get on the right bandwagon? I don't think Allen has ever intended that I or anyone should feel that way, but he does have a certain zeal to encourage adult educators to be aware of the huge and heretofore unnoticed or undocumented phenomenon of adults planning and initiating their own learning projects.

He has found that in these projects, adults do find some aspects fairly consistently troublesome, and that they probably would turn to educators for help if they perceived that we were available to them, and were able to provide the needed help. Allen has suggested a variety of things that institutions might do to accommodate themselves to this phenomenon, and to provide needed services to adult learners. Later today we'll have a chance to examine these ideas.

To date, I have not seen wide-spread institutional action growing out of Allen's research. (A lot of things are happening that make sense in relation to Allen's findings, i.e. arrangements being promoted by the Commission on Non-Traditional Study; but I cannot discern a direct cause-effect linkage.) I have seen two other results of his work: one has been the wide range of follow-up research. Allen tells me a national study is being done by someone in Pittsburgh, and is due to be released soon.

A second result of Allen's work that I have seen is a generalized yet pervasive attitude change in adult educators toward adults as learners. Too often we have fallen into the defensive trap of believing that our people are dumb and apathetic, not motivated to learn--simply because they don't happen to think it's important that they learn the particular things we think they should learn right now. Allen's work lifts us out of that trap. When we look at even the most woebegone adult, we have to say to ourselves "he's probably learning something," and we automatically have to have more respect for that person as a responsible, choice-making human.

Individualized Programmed Instruction

The third stream is a more visible one, more specialized, and more controversial than the others. Growing out of a Skinnerian philosophy, and implemented through modern technology, often computers, it is individualized programmed instruction.

Its most prevalent use in Canada is in manpower training and basic upgrading programs, where continuous intake of students is a serious problem for the teachers. It appears to be an effective and efficient approach with adults whose early school experiences were particularly disastrous, and in areas of learning where specifiable skills and knowledge are to be learned. An essential component of this approach is the performance based behavioral objective.

We are seeing a somewhat slower growth of this approach, in modified form, in professional education, under the labels of DACUM, and competency-based programs.

The appeal of this approach for many minds (especially of the educators) is its clarity and certainty, its accountability, its "scientific" base, its yield of immediate success experiences for learners, and its avoidance of open-ended negotiations with learners--it is neat, orderly, and preset.

In Self-Directed Learning, Knowles has two charts comparing assumptions and process elements of teacher-directed learning and self-directed learning. (See his book for a copy of these charts.) I set up each of his comparisons as a continuum, and placed each of these 5 streams or approaches on those continuua. I found that individualized programmed work always fell very near the teacher-directed end of each continuum for me. I admit to some bias in this direction, but my conclusion is that this approach is a self-directed one, but just barely. It is a self-directed approach that is very probably the most appropriate one for some learners learning some things.

I don't know the future of this approach. In addition to reading the latest published assessment in Canada (7), I've had three conversations in the last little while with significant people that lead me to predict a levelling off of its use. Robert Travers, after intense review of all the research, told me that the approach seems to be acceptable to learners up to a point; after that, the social isolation discourages them too much. A student of mine several years ago who is in the Ministry of Colleges and Universities, and who was instrumental in establishing such programs in Ontario's community colleges, shared the insight that the community college teachers were excited about the approach while they were writing programs, because it gave them their first opportunity to work and talk with colleagues in their fields (we wrote most programs in committees up our way); he suspected that the excitement would diminish once the programs were written and operating, and the boredom would result in less use of the programs. He was beginning to see the boredom set in. One of those affected by this boredom, one of the leading creators of DACUM and related programs in Ontario, is now working on his doctorate and visits me periodically about his dissertation plans. He quite openly admits that after having taken several courses in adult ed at OISE, he has undergone a metamorphosis; he has found

there is another way to view the world, another way to learn--a way in which people support each other and learn from each other, as well as from written materials. He's reevaluating the IPI approach he has pushed for so many years, and feels it has missed so much. He's quite eager to get back to the colleges and his colleagues there to attempt to bring about a conversion that would result in an enrichment or major modification of IPI programs.

Non-Traditional Institutional Arrangements

I don't have a very good name for the fourth stream, other than non-traditional institutional arrangements, those forms our institutions of higher education are investigating and trying such as external degrees, credit for life experience, universities without walls, contract learning, etc. These have been written about in books issuing forth from the Commission on Non-Traditional Study, peopled by adult educators such as Cy Houle, among others (8-12).

I admit to knowing very little, at least first-hand about this stream. Canadian universities, especially those in the eastern part of the country, are generally constrictively conservative, and are only peeking out of the corner of their eyes at what you are doing here. One or two of our community colleges have people coming down to investigate and see what you are learning. Roby Kidd keeps us informed of the work he is doing with several doctoral students in adult education through the Union Graduate School, and the graduate study they have contracted to do, some of it in other countries.

All of these forms recognize and legitimize the self-directedness of learners, and are thus important to us here, and are deeply significant to the future of adult learners in our society.

I'm sorry I don't know more about this stream; I know there are several of you here who are quite expert in this area, and I hope you make yourselves known in the discussions that will occur later today and tomorrow.

Heuristic Life Experience Learning

The fifth stream, which I have just now labelled, seems commonplace in the learning of adults, but is not getting any kind of press or much attention.

I've used here the term heuristic, which my Webster says refers to something which leads a person to investigate further himself. We often have life experiences which puzzle us, surprise us, confront us sufficiently that we can't let them rest--we have to investigate further. We do this by reflecting about a given experience, observing it and describing it. After a certain amount of this description, we find we need to identify the principle or generalization that was at work. Once that generalization is formed, we are armed to try that idea in a new experience. What I am describing you will recognize as the experiential learning process, described in fairly similar terms by Coleman (13) and Kolb (14).

Let's think of an example. The first two times I taught one of my courses, we found quite a diverse set of preferences on how to structure our time together. These preferences seemed to grow out of different definitions of what learning is, of what my role as teacher should be, in short, were differences of philosophy. The disagreements never got resolved, and we went

the entire term with submerged bitterness. I decided I had to do something different next time, and decided to surface differences via philosophy and learning style questionnaires, before too much was at stake in the course. The next time I taught the course, I did just that. During the third session of the course, I administered, and we discussed the Kolb Learning Style Inventory and an Educational Philosophy instrument devised by an earlier student, Jim Clement. The discussion seemed fruitful at the time. Later, on reflection, I realized that two things had happened in that course: we had arrived at a way of working together that satisfied everyone, without rancor; and second, that although I could predict how most individuals would score on the instruments after seeing them operate in two class sessions, I could not predict how they would behave in subsequent sessions. They were trying out new behaviors! The principle that seemed to jump out at me fairly clearly was that when you hear, accept, and legitimize a person's position early on, he or she is freed to be more flexible and to change and grow away from that position When a person has no need to fight for his stance to be known or to defend it against attack, he can move away from it without losing face or self-esteem. Since that realization hit me, I have used that principle many, many times--most often with impressively positive results. You will, of course, recognize my "new" principle that I discovered as being quite old and well established. Carl Rogers talks about it when he says we must respect and accept a person. It is the basic idea of the Overstreets' The Mind Goes Forth, in which they talk of making space for people to be. Jess Lair talks about the fact that no one will ever change until he believes we love him just the way he is. Carkhuff talks about it in his helping process material. Just about any psychotherapeutic theory includes it. I had read all of these over the years, but I didn't really know that principle until I discovered it for myself, from the inside-out. And it come about for me through the processes of having a concrete experience that caught my attention, reflecting on that experience, formulating the principle at work, and then experimenting with the principle.

This kind of learning is not a learning project that would get caught in Tough's net. I wasn't attempting to learn something. I was just trying to do my work in the best way I could. In doing my job in the best way I knew, I had an experience that I capitalized on, and learned from, because I took the time to notice what was happening, and to do something with that noticing.

I emphasize the taking time to notice, to reflect, and to formulate the principle, because if these steps aren't done in this kind of learning, the learning benefit can slip by us, and dissolve into the ether. All adults' lives are full of such opportunities, and we let them slip by, unless we have some skill in reflecting, in formulating principles, and in testing principles, and unless we discipline ourselves to do it. It seems to me there is an important role for the educator to play in helping all of us improve these skills, and in seeing the value of disciplining ourselves to use them.

I have to add that this kind of self-directed learning can be a terribly isolated and lonely form of self-direction; when carried out in too much isolation and without adequate feedback from others, it can result in inaccurate reflections and observation, and in false principles. It can, however, be engaged in with others, and we need to find better ways to do this.

Our Relationship to These Streams

Those are the five streams that I see flowing together to make up self-directed learning today. It might be useful for all of us to know just how we as a group relate to these streams. Would you answer the following questions (by show of hands)?

1. To what extent is your own self-directed learning of this type:
   a. group learning situations?
   b. Tough learning projects?
   c. Individualized programmed instruction?
   d. Using non-traditional institutional arrangements?
   e. Heuristic life experience learning?

2. To what extent is your professional work devoted to facilitating self-directed learning in others of each type?
   a....

There we are in all our diversity. These various approaches to self-directed learning are quite diverse; yet they do have common elements. They all do allow for the learner to be engaged in real and important decisions about his learning. They differ in how many decisions and which decisions they assume a learner can and should make. They also differ in the extent to which learning is seen as a social act in which the learner engages other learners and helpers in his learning.

Because we are all different in our beliefs and assumptions and experience on this issue, we will probably continue to have this diversity in self-directed learning. Learners, being people just as we are, will have different learning style preferences, and have different kinds of things to learn, and may at times use all of these forms.

Mishmash or Movement?

Does all of this add up to a mishmash or a movement? I suppose the answer depends on whether we choose to look at the dissimilarities or at the common elements. It depends too on whether we focus only on our day-by-day efforts and those of our neighbor down the hall, or whether we look beyond ourselves, to the myriad ways educators and learners alike are attempting to push back whatever binds the fullest exercise of human potential. The Overstreets put it neatly:

> We would be willing to guess that the many small space-making adventures to which we lend ourselves, day by day, within the various institutions to which we belong, are part of something very much larger than themselves; part of a movement that, as it unfolds and matures, will provide more spacious room for the human spirit than it has ever known before. (4)

Visions of What Could Be

If you're willing to accept that all this adds up to a movement, and an important one, for the people of Wisconsin, of Ontario, and everywhere else, we need to reflect for a few minutes about the visions and hopes we have for it--some of the qualities we hope will characterize it. I have a

list of 10 visions and hopes I have for self-directed learning. My strategy for arriving at my list was to start with the things that worry me about what I see happening, and then turn each worry around to find the positive thing that each worry meant I wanted to see happen.

Before I share my list with you, I'd like you to make your own list. You have an index card; on that card would you write 1, 2, or 3 worries you have about self-directed learning, and then 1,2, or 3 visions or hopes you have for it? After we discuss these for a few minutes here, we will collect the cards. Later we will try to summarize them and give you a report.

(Pause for activity of thinking and writing)
(Ask for brief contributions from group. Collect cards)

1. Plentiful Options for Self-Aware Learner Choices

For people to be self-directed, they have to make choices. To make choices, they have to have options to choose from. We have to provide lots of options. This challenge is one for administrators and programmers who provide the learning opportunities for the learners. There are several aspects to consider.

a. Adults engaged in learning projects and heuristic experiential learning don't realize that they are learning.--To them, learning is what you do when you go to school. An inevitable response Allen Tough finds when he asks someone to tell him about their learning in the last six months is "who, me?" We need to help people identify that they are learning before they will become self-aware as learners.

b. Adults don't think much about how they learn.--They are not aware of their learning processes. This is true even of our incoming graduate students. However, confronted by the need to make choices, and to be responsible for their own learning, the awarness of themselves as unique learners grows fast; so does their excitement and conviction that all education must in some way help learners grow in understanding of themselves and their own learning processes and preference.

Our work in this area in my department is beginning to have an impact on the community. I was told last week that in one agency training volunteers, the trainer is now being confronted by learners who suggest "let's change this design a little, I don't learn this way," or "that's not the way I learn best." Nuisance or joy for the trainer? In the long run, she has to welcome and rejoice at learners having these insights.

c. Adults differ from one another in how they learn, how they prefer to learn, and in their ability and capacity to be self-directing.--This is an obvious statement, but the implications of it are extremely complex.

Reams of research have been done on individual differences in learners; some of the more relevant has dealt with individuals' needs for externally-provided structures, as opposed to the ability and desire to provide or create one's own structure (15, 16, 17, 18). Witkin's analytic-global categorization, and Hunt's Conceptual Level both deal with this quality. There are relatively simple instruments available to use to place learners in the appropriate categories, and research has demonstrated that when this is done, and the homogeneous groups are provided with the appropriate amount of structure or non-structure, the individuals do learn better--at least they learn some things better.

When I have suggested to learners in my classes that we might experiment with such groupings, I have always met with keen resistance. As I have explored this resistance, I agree with it. No one wants to be told he has a low Conceptual Level, and is not capable of planning his own learning. If he is given some freedom, he might be willing to say that "right now, for my purposes in this new area, I choose to have some help, at least for a while in structuring my learning." But that freedom is a very different matter. Even if learners would be willing to leave the groupings up to educators (and I hope they never are), we would not know how best to group: should we group for a good match? Or is there a creative mis-match that would help people grow more and become more self-directing? Messick (19) goes into this dilemma in considerable detail, to the point where he gives up and says we need to leave it to the learner's choice. He does, however, recognize that giving learners the choice is a dilemma too. He quotes Dave Hunt:

> Educational arrangements in which the student is entirely responsible for matching himself to an educational environment raise basic questions about the nature of student needs and who is to define them. Whatever one's stance on this issue, it seems clear that more attention should be paid to the question of how students can learn to make more appropriate choices. The issue is not so much whether a student at any age knows what is best for himself, but rather how he can become more self-responsible through experiencing the consequences of his actions without being overwhelmed by irreversible negative consequences. (2)

Obviously we have to provide lots of different kinds of opportunities for learners, and we need to call their attention to the importance of their evaluating their preferences among these different forms. We can help them become more aware of themselves as learners.

I suspect that those of you who are counsellors are suggesting to learners that they consider the different forms of learning available, and choose that which matches their preferences best; I think those of us who are teachers and writers are not being as responsible. Each of us has our way, and it is the right way, and if you don't match well with it, it's your fault, Charlie; and I will do my damndest to convince you you will learn better this way if you only give it a try. It is extremely difficult in one classroom, or one short workshop, to provide for different learning styles, but much more can be done than we are doing.

I saw a small example several weeks ago at a conference in Toronto. The program had been developed ahead of time, with speakers and workshop sessions. However, the planning committee recognized that participants would be self-directed persons, and might want to opt out of some planned sessions to pursue other resources in the city, create small groups, or take more time with an earlier speaker. To encourage these variations to occur, they had several planning committee members (who were well versed in resources at OISE, and in the city) identified with big buttons "I'm a Listener. Try Me." They were ready to help participants match up with non-scheduled resources.

d. Adult educators are all different too.--We will never all want to do our work in the same way. You like learning by yourself, and will tend to promote isolated learning. I, on the other hand, like learning in interactive settings, and will find my place in groups. We differ not only in

our philosophies and values, but also in our capability to open ourselves to emergent negotiation and mutual learning with our clients.

Somehow, a well orchestrated pluralistic philosophy has to be implemented. We have not yet planned or evaluated our educational provisions from this base. I restate this vision: plentiful options for self-aware learner choices.

2. Opportunities to Learn How I Learn, How to Learn

About five years ago, our Ontario Educational Communications Authority polled citizens and leaders of Ontario, using a Delphi technique, about what they considered the prime learning needs of the people of Ontario. Learning how to learn turned up ninth on the priority list--an impressive placing. To my knowledge, the adult educational system in Ontario has not taken that finding seriously yet. What workshops on how to learn I have seen have been done at colleges and universities, and deal with skills such as taking notes in lectures, writing term papers, passing exams, and reading books proactively. Most of these seem to be system-coping skills, rather than learning skills.

In my classes I try very hard to be sensitive to the difficulties students are having coping with an emergent, self-responsible learning group. Sometimes one doesn't have to be very sensitive: one is told in not too subtle terms at times just how a learner is feeling. Through class process reviews, through individual conversations, and through my own observation, I find learners have problems such as these: (And I'm eager to compare my list with a study about to come in by Hindle (24).)

a. Becoming and staying responsible for themselves.--How often we leave our choice-making selves outside when we walk through the doors of an event labelled "education." I pose the question to you of whether you feel as responsible for yourself right this minute as you do on the job? Are you, to any extent, turning your life over to me for this hour, without really considering if this is the best use of your time? If you were feeling that I am wasting your hour, would you do something about it, such as get up and go do something else? Or stop me and ask if others perhaps feel the way you do, and can't we redirect how we are spending our time together? I can see some of you cringe at the thought of speaking up in a group like this in such a confronting way, so you can begin to feel how hard it is to be responsible for yourself in many learning situations.

One of the worst (and nicest) things that can happen to a teacher has happened to me at OISE. The word is out that my courses are good ones to take —the best learning experiences people have ever had. So people come, expecting me to "do it to them," to watch the master at work. After about 9 hours together, they begin to really realize that although I am going to be fully engaged, whatever good that's going to happen to them they have to make happen themselves. That point of realization used to be called "dump the professor" night; now that I'm aware of the process, and try to prepare us all for it, it is more subtly known as the moment when "the penny drops." People have taken on responsibility for what happens to them. It is quite a different thing to intellectualize about taking responsibility than to immerse yourself in the hard struggle of being responsible.

b. Maintaining and increasing self-esteem.--Because we are socialized to perform well in educational settings, and to expect to be judged there, and are taught to be competitive, learning situations remain threatening places. Will I be as good as the next guy? Will I make a fool of myself? It is not OK to make a mistake or ask a foolish question, or to "mess up." So our self-esteem is on the line at any time. Add to that precariousness, a new system of learning in which we are to be self-directed as learners, and we may well panic. Lorraine Deason, our department's excellent administrative assistant put it well the other day. She said "people come into our department, and find they have no one else to fall back on ultimately but themselves. And if you don't like yourself very much, you know you're in trouble."

I also find that learners, once they are enabled to say to one another and to me (and I to them) "I am scared about doing well." develop intense feelings of support for each other, and find great bursts of high energy for learning. Somehow, we have to make room for learners to deal with this issue explicitly.

c. Owning one's strengths, desires, skills, needs.--One of the most dysfunctional teachings of our society is to be humble. Never toot your own horn. If you are assertive, people won't like you. Consequently, learners in an already threatening situation, lose touch with their own strengths and skills. How it pleases me when an adult says to me "I want to do this project because I am good at a, b, c, and I know I will be a good educator if I learn d." Without this recognition of our strengths, how can we be assertive and responsible, how can we build on what we have already? How can we be anything but dependent children again? Until our society changes on this (and it is) I guess we will have to work hard at confirming people, mirroring back to them the strengths we see in them. We all glow and grow with such interaction.

d. Trusting own flow, energies, intuitions.--Not many educators talk in such terms; I have learned to from my students, and I am glad they have taught me. Unless adults have been in therapy or intensive groups such as Gestalt groups, they are not particularly in touch with their feelings, nor do they have the skill or habit of being in touch with what messages their bodies are sending them. Such skills are very useful in self-directed learning, where the learner is the only one who does indeed know where he is, and what is right for him to do next. We have been finding that when someone comes to us unsure of what to do as a course project, or is in a confusing or conflict situation, the suggestion that they get in touch with where their own energy is, and flow with that, is a very freeing suggestion, and creative and responsible work always follows. I think it has a lot to do with not getting caught up in what we suppose other people's expectations to be of us--and perhaps this is another definition of what being responsible for yourself is about.

e. Dealing with confusion and ambiguity.--There are many sources of ambiguity in a self-directed learning project, and we struggle to find ways to reduce as much of the ambiguity as we can, up to a point. Some ambiguity, however, seems required for the person to move to the point of seeing "the penny drop." I think the ambiguity of open-ended learning is difficult for many people, too. Once they are in areas of learning where there are no right or wrong answers, where you in essence have to create your own knowledge and test it yourself, you do feel shaky and alone. Learners need a lot of support at such times.

f. Clarifying what they want to learn.--I want to say more about this one later, so at this point only note that it is a difficult process for most learners.

g. Redefining what legitimate knowledge is.--A majority of adults define knowledge as what you read in books, find in a research report, or hear from a professor. What they learn from their own experience and reflections is valuable, but it isn't legitimate knowledge. Principles derived from reflecting and conceptualizing from your own experience, when thoughtfully and responsibly developed and tested is legitimate knowledge. Probably more of our behavior grows out of this kind of learning than any other, and as I said earlier, somehow we need to help people learn how to capitalize on their experiences more, and regard that as legitimate learning.

h. Relating to others.--This difficulty is, of course, relevant only in interactive learning situations. When the learning group's purpose is for each individual in the group to be self-directing, and to learn those things most important to her, how to relate to others becomes a fine-tuned balancing act, requiring a flowing with the rhythms of private time and relating time, between individual goals and group goals, between self-interest and concern and support for others. Developing the required sensitivities is not easy, and much of our literature on interpersonal relationships and group development doesn't take these subtleties into account.

i. Dealing with the content.--Those of us who are humanistically oriented tend to assume that once the climate is OK, the learner is clear about what he wants to learn, and has found the appropriate resources, he will, of course, automatically learn, and our work is done. This is not so. Learners have trouble understanding some of what they read (much of it isn't well written!), difficulty in relating abstract ideas to the specifics of their own lives, and many obstacles in applying new learnings in their lives. We have to be fully available to learners during these phases of their learning projects.

I apologize for the length of this list, but is is a somewhat different list from that Knowles or Tough provide, and I felt it important to share it with you.

The point of this whole section is that learners usually haven't thought about how they learn, and have difficulties with some aspects of self-directed learning. I know I am working as hard as I can to invent ways to help learners deal with these problems, my students are working at it, you are no doubt working on it, and Knowles has provided us with a few tools in his book. I hope someday someone will put together a compendium of all of these insights and inventions (at least the ones that work). A "Pfeiffer and Jones" Handbook for Self-Directed Learners and Their Facilitators might just be a best-seller!

3. See and Study Learning as a Fluid Process

A third vision I have is that we will see and study learning as a fluid process. I think we have had enough static studies. As you will know by now, I see learning as an emerging flow, that should not be reduced to 5 easy mechanical steps. I would like to see us doing more research,

using this view as our starting point. Let me illustrate that I mean by telling you about some of the work that I and some of my associates are doing.

The concept I have developed of the learning processes in a learning group has 15 processes that are in interaction with one another constantly, and each of these 15 processes is changing over time. For example, "clarifying what I want to learn" is not a one-time event in a learning project or course, it is constantly happening; the learner is always going through the process of clarifying what he wants to learn. Likewise he is always, during the course, going through a process of working at maintaining his self-esteem. Simultaneously, he is working at finding the personal meanings in the content he is learning and the experiences he is having. And so on. His goal setting, his self-esteem work, his finding personal meaning are all affecting each other at any given time. I have this concept, but it quite complex and I don't understand it very well yet.

Starting with some of these ideas, Marilyn Taylor (27) and Heather Bates (20) last fall interviewed 12 learners in my class for at least an hour after each of the 13 class sessions. The interviews were individual. Rather simply put, the interview consisted of asking the learner "What's been happening for you this week in relation to the course?" (As a side-light, I must tell you that the fact that half of the students in the course had this extensive time for verbalized reflection about what was happening to them enriched the course sessions beyond belief. It convinced me that we must find better ways to help learners learn to reflect systematically on their experiences.) As you can imagine, Heather and Marilyn have mounds of data, and are only beginning the analysis. (Heather also has a 10 day old son, so we will have to wait a bit longer for her findings.) Marilyn has analyzed the first person's case, and has a finding which I sense to be most important, although we don't know yet for how many people it will hold true. In this case, she has clearly seen that there is a significant interaction for the individual between three processes: (1) his ability to make sense of his experience in the class, order it, and label it; (2) his feelings of self-esteem, and (3) his ability to relate to other individuals in the class. We don't know cause and effect, or which comes first, but we do see that they interact and enhance one another. There seem to be all kinds of implications of this finding for when we introduce experiential learning activities into a learning group, how much attention we need to give, even at the graduate level, to self-esteem, and the time we need to give in the sessions to enable people to get to know one another at a fairly deep and trusting level. And only by doing this kind of research will we gain more of this kind of insight. Had we waited six months and asked this individual what he had difficulty with when he took 1110 at OISE, I don't think we would have gained this insight.

I hope you will watch for these dissertations: Heather's is on the process of need identification as these learners experienced it. Another study, by Lee Davies (21), is about to be launched with another group of learners; he will use the same type of methodology, but will look at energy flows in a learning situation--what's going on for a person when his energy is high, and when it's low, and how do these interrelate with the person's feeling of power and competence and the off-setting feelings of load.

Such studies, when written for popular consumption, may sensitize learners to the drama of their own learning processes, and should keep us educators from making learning seem like a dry and mechanical business.

4. Focus on Learning, Not Teaching

I firmly believe that if we, as educators, use as our starting point the question "what is happening in the learner right now, and how can I help best?" our behavior will be different than it is when we start with the question "what should I be doing right now?" I cannot document this belief, or even give you an illustration. I wish I could. However, I know at the core of my being that it is true. Perhaps the explanation is that with the learner as our starting point, we are more real, and more present as persons with the learners (as opposed to being a walking, talking "role"), and that in itself makes the difference. Adult learners, like little kids, can detect a phony or distant person very quickly. Maybe there are other explanations. I simply invite you to give it much consideration.

5. Goal Setting as a Flow (And Sometimes Legitimately Ignored)

As a Cooperative Extension Agent in Ohio, and as a graduate student in extension education courses, I had the century's most thorough training in writing educational objectives. And I bought it, every bit. As a state leader in West Virginia, I struggled valiantly to help, and push, staff to write them, even those who were working in the deepest hollows of Appalachia. If you didn't write them, you just weren't thinking, you weren't rational, you weren't logical, you weren't going to be effective. I, of course, transferred this training to my teaching of self-directed learners. Their learning could not be effective if they didn't identify their objectives.

But something happened in Toronto. I had students who would not set objectives, who objected to it, and told me they didn't learn that way, thank you very much. And I had to pay attention to them, because they were bright, had sparkle in their eyes, were creative, were engaging in learning more profound and signficiant than other students. They were not dullards, they were not copping out, they were not irresponsible, as I had assumed all non-objective-writers had to be. They were not waiting for me to write the objectives for them; they simply did not need objectives. And I have been listening carefully to people who don't set objectives ever since. And they have a firm grasp on some truths about learning that we educators must heed.

Let's recognize the forces there are within self-directed learning streams to push learners into fairly straight-jacketed approaches to setting objectives. Knowles' learning contract is one such instance. Few of us will notice that he suggests their use in <u>certain</u> situations, such as preparing for professional certification (5, p. 130). Once having made that point, he himself proceeds to use them in <u>all</u> instances. I mentioned earlier a recent conference in Toronto for continuing education people in the ministry. My role in that conference was to react to a presentation in which the person pushed hard for teaching ministers to write Mager-type performance based behavioral objectives—for their self-directed learning projects. I suspect that both of these efforts grow out of a recognition that behavioral objectives and learning contracts are a means for the educator to maintain some control, rather than grow out of conviction that learners learn best when they have stated objectives.

Frewin (23) found that about one-third of the learners he studied had some question about the utility of stating objectives for their own learning in graduate courses in adult education. Let's look at some of the instances in which people do not need learning objectives, other than

the vaguest directional aims:

(1) Sometimes learners get good vibes from you, or from the situation, and want to interact with you in a learning situation. They trust or intuit that just by being present, fully present, they will learn something important. They do not want to be constrained by setting an objective. They want to existentially experience what there is in the situation, and then draw what conclusions they can from the experience. This is not a copping out, but is a very demanding way to go about learning. The people who engage in my classes from this stance are usually the ones who provide us with the freshest and most creative insights and learnings.

(2) More often, learners want to explore a lot of avenues first, before confining themselves to an objective. They want to follow lots of leads, follow their own energy flows, read widely, ponder lots of areas, before closing out any options. (And setting an objective is saying "No" to the infinite other objectives you could have chosen.) There are many learners who don't like to commit themselves to an objective until they feel fairly sure they can accomplish it. A very reasonable, human response!

(3) Sometimes people come to us not knowing enough about our field to know what there is to learn. Even if they have some notion of what they might want to learn, they are shy about stating it. If the fellow next to you in a geology class said he wanted to do a comparison of the doleritic margin and the rhyolitic centers of the Whin sill in the Pennines, with the New York Pallisades, wouldn't you feel a little shy about saying you came because you want to know more about where those pretty rocks and things come from that you see when you drive through the mountains? This is the learner new to a field.

(4) The learner more advanced in a field is another problem. He or she is often engaged in a learning project in which the knowledge, the ultimate skill isn't known by anyone yet. The learner is going to create it. He may have only a question, and no one knows what the answer is going to be like until he finds it. He may even find he is asking the wrong question. I suspect this learner, if you asked him to state a behavioral objective for this project, would tell you to "get lost".

(5) A final example where objectives may be dysfunctional is the phenomenon of intuitive learning, a process by which some people are able to keep themselves open and free to allow intuitions to flow, to know things they don't know how they know. One of my students, Marge Denis (22) is studying this phenomenon. The obvious people for her to study are psychics; I am amazed, however, at the number of closet intuitives there are among normal populations, such as adult educators.

I conclude this section on goal-setting by admitting that none of my non-objective writers live their entire lives in goal-free ways. They clearly do set goals. But there are some times when learning some things that having goals stated is not productive for the learner. We must make room for this kind of learner.

6. Educators Will Value Learners

Of course we do. Except some of them are pretty dumb, some are awfully stubborn, and lots of adults just don't want to learn.

Of course we do. Except when we're very tired, or very busy, or very threatened, or there's a lot at stake for us. Or when they don't want to learn what we think they should learn.

We must watch ourselves, and help each other on this one. Facilitating self-directing learning just won't work unless it grows out of a deep valuing and respect for learners and their ultimate wisdom and capacity to make healthy decisions for their own lives.

7. Congruence Between Values and Techniques

I worry deeply that some of us, without carefully examining our values, and without changing our values, will start using the techniques of self-directed learning, such as the tools Malcolm gives us in his book. In most cases, I think the result will be unpleasant and unfortunate for everyone, and will give self-directed learning yet another "black eye."

A professor published an article recently extolling the virtues of an invention of his: a multiple choice check list learning contract. Very efficient, Saves much time. No doubt an advancement for his students. But somehow I think he has missed the point. He has the technique, but not the value base.

I am now analyzing data from intensive interviews with adult educators in Ontario. I find very little congruence between their stated values of respect for learners and belief in their capacity for self-direction and their reported involvement of learners in classroom decisions. Here, the values are espoused, but the techniques or action are missing.

I value congruence between espoused theories and theories in action. This congruence is difficult for each of us. But we can work on it. I commend Argyris and Schon's methodology (31) to you if you want to give serious attention to your own congruence.

8. Clarity and Consistency of Control

My fear underlying this hope is that as we move into allowing learners more decision-making power, we educators will find more subtle ways to keep control of the learning process. I earlier called attention to learning contracts as one device for keeping control.

Greer Boyce, a professor of theology who was studying with me this year, and a very sensitive, self-aware man, told me an insight he gained in my course. He said that several years ago he had shifted from being a content expert, a person in control of the content, to being a facilitator of the process. This year he realized he had merely shifted his control from that of content to process. He said

> I now see the possibilities of being a responsible learner with the learners in the class, openly learning with them, not only the specific area of subject matter under consideration, but also in facilitating each others' learning. This is, in fact, in accord with the concept of a university as a "community of scholars."

In this illustration I am arguing for clarity of control--honest and explicit owning up to what decisons are mine, which are yours, and which are ours to negotiate.

I also mentioned consistency. Mann (25) has found in his detailed research of classroom histories, and my own experience confirms this, there comes a "crunch-time" when your heart sinks to your big toe, and you feel this self-direction just isn't going to work, that this group just can't handle it. The temptation is immense to take back the control you put in their hands and say "I will save you; I will plan the rest of the course for you." Of course their response would be, quite reasonably, "See, we knew you didn't really mean it when you said we were to be self-directing." We must watch carefully how we do respond at that point which inevitably comes.

9. Interdependence, Not Independence as a Goal

My deepest fear of all is that in our attempts to lead people out of dependent relationships with us as teachers, we will envision the new goal to be independent learners. I think this is the worst mistake we could make--for ourselves and for our learners. For ourselves it would mean there would be no work of much meaning to us. For learners it would mean very impoverished learning.

I view interdependence as a more advanced state of development, and one that can be reached only after persons work through the dependent, counterdependent, and independent stages.

One of the qualities of interdependence is mutuality of decision-making, of discovery, of learning. I could talk at length about interdependence and mutuality; instead I'll share a quote from the Overstreets, paraphrasing a poem by E.E. Cummings. It gives the feel of mutuality when you are living it as a teacher.

> I like my mind when it is with your mind; my words when they mingle with yours; and my laughter when it is you I am laughing with. I like even my sorrow when you share it, and my shortcomings when you redeem them by your understanding. When I am with you, these are all such quite new things. (4)

To understand better what interdependence in learning is, I have studied the excellent article by Nash (29), and by Moustakas (29); but I also turn to man-woman relationships to enrich the meanings. Shostrum and Kavanaugh (30) have an excellent book. I even found a beautiful illustration and reminder in Wayne Dyer's Your Erroneous Zones. He suggests we mentally challenge the words of popular songs. "You are the sunshine of my life," would better become "I am the sunshine of my life, and having you in it makes it even brighter." "You are the sunshine of my life"is a dependent stance. "I am the sunshine of my life" is an independence; and when we can add "and having you in it makes it even brighter" we have moved to interdependence.

I intend to do more work on these concepts in relation to self-directed learning. If you can help me, please let me know.

10. Adult Educators, Sensitive with Strong Sense of Self-Worth

To engage with learners in ways I have been envisioning here requires of all of us a great deal more than technical skills, much more than a solid value base. It requires of us an unshakeable sense of our own worth as whole persons, and a willingness to bring that whole person into the interaction with our colleagues--our adult learners. It requires us to be strong enough to say to our learners "I don't know," "I'm scared," "I feel inadequate right now," I care deeply about this," "I was wrong; how can we together make it right?" And so much more.

Few of us come with this strength. None of our Adult Education graduate programs help us much in this area. I don't think in-service training programs do much for us. We have to take responsibility for this ourselves. There are a number of routes to this kind of personal growth.

I would like to share 4 sentences of my own personal history with you, because I have chosen a route not often admitted to among adult educators, except in my own department where it is quite common. I have been in individual therapy with a psychiatrist for two and one half years. As a result of that learning project, I have become a much stronger, better teacher, and the rewards of teaching have increased a hundred-fold for me during that time. Tne rewards are both intellectual creativity, and emotional support, love and mutuality with my students. And I know more good things will unfold in the year ahead. When I first told friends from Chicago that I was in therapy, Alex said "Oh, that's too bad." Karen's response was "I'm so happy for you." (Alex's second thought on the matter was in agreement with Karen's) I wish more of us believed you don't have to be sick to benefit from therapy; therapy is an intense growth--learning project! You may not choose that path, but choose some path that will take you toward fuller realization of all you can be. You owe it to your learners, if not to yourself.

In my earliest comments, I suggested many adult educators are searching. We must not limit our search to new ways <u>to do</u> things; we must also search for new ways <u>to be</u> as people.

If we can do this through our own self-directed learning, if we can consider the visions I've spun and bring them into being (if they are worthy) we will have a world in which butterflies are free, and wild birds sing without confinement, and in which the human spirit has more spacious room than it has ever known before. We will work our way out of the dilemma John Ohliger posed:

> We are . . . caught in the near tragic grip of the spiraling dilemma that the more we contribute, in the name of "helping people," to the trend toward centralized control over people's lives. . .the less we can live the best ethics of our profession. Certainly one of these ethics is that adult educators work in partnership with individuals and groups to help them increase their responsible control over their lives. (3)

It's our choice--yours and mine. After all, we are self-directing.

SELECTED SOURCES

Quotations

1. Godby, Gordon. "Cloud Above the Picnic." Adult Leadership, May, 1977, p. 275.

2. Hunt, David E. "Person-Environment Interaction: A Challenge Found Wanting Before it was Tried." Review of Educational Research, 45 (Spring, 1975), 209-230.

3. Ohliger, John. "Prospects for a Learning Society." Adult Leadership, September, 1975, pp. 37-39.

4. Overstreet, Harry and Bonaro. The Mind Goes Forth: The Drama of Understanding. New York: W.W. Norton, 1956.

The Five Streams of Self-Directed Learning

Group Learning Situations

5. Knowles, Malcolm S. Self-Directed Learning: A Guide for Learners and Teachers. New York: Association Press, 1975.

Adult Learning Projects

6. Tough, Allen. The Adult's Learning Projects: A Fresh Approach to Theory and Practice in Adult Learning. Toronto: The Ontario Institute for Studies in Education, 1971.

A bibliography of completed research related to adult learning projects is available from Allen Tough.

Individualized Instruction

7. Woodrow, John. "Installing an Individualized Learning System: An Ontario Community College Experience." Adult Training (Dept. of Manpower and Immigration, Ottawa), 2 (no. 3, 1976), 18-22.

Institutional Arrangements

8. Alternative Higher Education: The Journal of Non-Traditional Studies, 1 (Fall, 1976).

9. Commission on Non-Traditional Study. Diversity by Design. San Francisco: Jossey-Bass, 1973.

10. Eldred, Marilou. "University Without Walls: Seminar in Process Education." Paper presented at the Adult Education Research Conference, Minneapolis, April, 1977.

11. Houle, Cyril. The External Degree. San Francisco: Jossey-Bass, 1973.

12. Keeton, Morris T., et al. Experiential Learning: Rationale, Characteristics, and Assessment. San Francisco: Jossey-Bass, 1976.

13. Coleman, James S. "Differences Between Experiential and Classroom Learning." Experiential Learning: Rationale, Characteristics, and Assessment. Edited by Morris T. Keeton. San Francisco: Jossey-Bass, 1976.

14. Kolb, David A.; Rubin, Irwin M.; and McIntyre, James M.(eds.) Organizational Psychology: A Book of Readings, 2nd ed. Englewood Cliffs, N.J.: Prentice-Hall, 1974.

Individual Differences in Learning Style

15. Cawley, Richard; Miller, Sheila; and Milligan, James. "Cognitive Styles and the Adult Learner." Adult Education , XXVI (Winter, 1976), 101-116.

16. Hunt, David E. and Sullivan Ed. Between Psychology and Education. Hinsdale, Ill.: Dryden, 1974.

17. Kolb. See reference no. 14 above.

18. Mann, Richard. The College Classroom: Change, Conflict, and Learning. New York: Wiley, 1970.

19. Messick, Samuel, and associates. Individuality in Learning. San Francisco: Jossey-Bass, 1976.

Studies of Self-Directed Learning
Processes, Dynamics

20. Bates, Heather. "A Phenomenological Study of Adult Learners." Ed.D. dissertation, O.I.S.E. (in progress).

21. Davies, Lee. "Energy Experiences of Adults in Learning Groups." Ed.D. dissertation, O.I.S.E. (in progress).

22. Denis, Margaret. "Toward the Development of a Theory of Intuitive Learning in Adults." Ed.D. dissertation, O.I.S.E. (in progress).

23. Frewin, Carlos. "Individual Goal-Setting in Formal Education Settings." Unpublished Ed.D. dissertation, O.I.S.E., 1976.

24. Hindle, Judith. "An Investigation into Significant Learning Events of Graduate Nurses in a Structured Continuing Education Program; and Analysis of the Extent to Which Knowles' Process Elements and Behaviors of Self-Directed Learning are Evident in Learner Accounts." M.A. thesis, O.I.S.E. (in progress).

25. Mann. See reference no. 18 above.

26. Smith, Robert M. Learning How to Learn in Adult Education. Information Series No. 10. Dekalb: Northern Illinois University Program in Career Education, 1977.

27. Taylor, Marilyn. "Adult Learning in an Emergent Learning Group." Ph.D. dissertation, O.I.S.E. (in progress).

Interdependence

28. Moustakas, Clark E. "The Individual Versus the Group." Loneliness and Love. Englewood Cliffs, N.J.: Prentice-Hall, 1972.

29. Nash, Paul. "Towards a Radical View of Authority Relationships in Education." Educational Reconstruction: Promise and Challenge. Columbus, Ohio: Merrill, 1973.

30. Shostrom, Everett, and Kavanaugh, James. Between Man and Woman: The Dynamics of Intersexual Relationships. New York: Bantam, 1975.

Congruence Between Theory and Practice

31. Argyris, Chris, and Schon, Donald A. Theory in Practice: Increasing Professional Effectiveness. San Francisco: Jossey-Bass, 1975.